

## UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,142	03/14/2000	Pablo Tamayo	2825.1014-001	8330
21005	7590 08/20/2004		EXAMINER	
	N, BROOK, SMITH &	. ZHOU, SHUBO		
530 VIRGINIA ROAD P.O. BOX 9133			ART UNIT	PAPER NUMBER
CONCORD,	, MA 01742-9133	1631		
			DATE MAILED: 08/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Advisory Action	09/525,142	TAMAYO ET AL.			
Advisory Action	Examiner	Art Unit			
	Shubo (Joe) Zhou	1631			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
THE REPLY FILED 29 July 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.					
PERIOD FOR REPLY [check either a) or b)]					
a) The period for reply expiresmonths from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.					
2. The proposed amendment(s) will not be entered because:					
(a) they raise new issues that would require further consideration and/or search (see NOTE below);					
(b) they raise the issue of new matter (see Note below);					
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or					
(d) They present additional claims without canceling a corresponding number of finally rejected claims.					
NOTE:					
3. Applicant's reply has overcome the following rejection(s):					
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).					
5.⊠ The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see continuation sheet</u> .					
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.					
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.					
The status of the claim(s) is (or will be) as follows:					
Claim(s) allowed:					
Claim(s) objected to:					
Claim(s) rejected: 1-18 and 62.					
Claim(s) withdrawn from consideration:					
3.⊠ The drawing correction filed on <u>31 January 2002</u> is a)⊠ approved or b) $\square$ disapproved by the Examiner.					
9. Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s)					
10. Other:					
		(4)			

## Continuation Sheet (PTOL-303)

Continuation of 5c):

Regarding the rejection of claims 1-18, and 62, applicants first argue that the Office failed to give adequate consideration of the Declaration by Gavriel Kreiman filed 7/14/03 because Kreiman stated in the declaration that there would be no motivation for the combination of the references, and he would not have combined the Mack reference with the Mangiameli reference. This is not convincing because as stated in the Office action mailed 6/3/04, it would have been obvious for one of ordinary skill in the art to combine the cited references because the fact that Mangiameli et al. compare SOM and hierarchical clustering method for data analysis indicates that SOM and cluster analysis are art recognized equivalents for the same purpose, i.e. clustering analysis of data. Further, since Mangiameli et al. demonstrates the superiority of SOM in its accuracy and robustness in data analysis over cluster analysis, which was used by Mack, one of ordinary skill in the art would have been motivated to modify Mack to use SOM for the analysis of gene expression data. Applicants the arque that there are secondary evidence that refute obviousness. Applicants argue that the Declaration by Kreiman states that there was long felt need solved by the claimed invention. This is not convincing because the Declaration does not explicitly indicate what the long fe need is, and a generic statement that the claimed invention is "a very valuable and novel tool" is not convincing enough because the values and novelty are not detailed. Furthermore, although both the Declaration and applicants' previous responses repeatedly assert tha there are unexpected results for the claimed invention, applicants and the Declaration never specify what the unexpected results are. Applicants also state in the response that several publications credit the inventors for introducing SOMs to the analysis of microarray data including Kaminski et al., American J. of Respiratory Cell and Molecular Biology, 2000, Vol. 27, pp. 125-132. These references have not been considered because they are not presented in a declaration or affidavit, and no copies of the publications have been provided to the Office. Any objective evidence of nonobviousness must be factually supported by an appropriate affidavit or declaration to be of probative value. See MPEP 716.01(c). Thus, the rejection stands.

VAS

JOHN S. BRUSCA, PH.D PRIMARY EXAMINER